

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 1, 3-5, 8-10, and 12-21 are currently pending. Claims 2 and 11 are canceled by this reply, without prejudice or disclaimer. Claims 1 and 19-21 are independent. The remaining claims depend, directly or indirectly, from claim 1.

Claim Amendments

Independent claims 1, 19, 20, and 21 are amended for purposes of clarification. No new matter is added by way of these amendments, as support can be found, for example, at least in the originally filed claims and in paragraphs [0029], [0033], and [0058] of the publication of the present application.

Rejection(s) under 35 U.S.C. § 112

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to explain what is meant by “elementary pattern.” Accordingly, all the independent claims are amended to specifically recite the definition of an elementary pattern. An elementary pattern is a term of art, known to those skilled in the art, as a pattern of magnets and coil that are in a particular order, and such elementary patterns are used to control the power to the electronic rotating machine. *See, e.g.*, paragraphs [0029], [0033], and [0058] of the publication of the present application. Accordingly, Applicant asserts that the independent claims are no longer indefinite, as the term “elementary pattern” is clearly defined by the amended claims. Withdrawal of this rejection is respectfully requested.

Rejection(s) under 35 U.S.C. § 103(a)*Claims 1-5, 8-17, and 19-21*

Claims 1-5, 8-17, and 19-21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 5,663,605 (“Evans”) in view of US Patent No. 6,512,318 (“Torok”). Claims 2 and 11 are canceled by this reply; thus, this rejection is moot with respect to claims 2 and 11. To the extent that this rejection may still apply to the remaining amended claims, this rejection is respectfully traversed.

MPEP § 2143 states that “[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.” Further, when combining prior art elements, the Examiner “must articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference....” MPEP § 2143(A).

The present invention is directed to controlling the basic power in an electronic rotating machine by manipulating magnets and coils that produce elementary patterns. *See* publication of present application, paragraphs [0023] and [0029]. In the embodiments shown in Figures 2-3 of the present application, the ratio of Na:Nb is either 2:1 or 1:2. This is the embodiment that is now introduced into the claims. Accordingly, the claims now require, in part, an arrangement of magnets and coil poles that form a plurality of *identical* elementary patterns (Nme), where the ratio of the number of magnets (Na) to the number of coil poles (Nb) is *not* 1:1. *See* Figs. 2-3 of the Specification as filed.

Applicant respectfully asserts that Evans fails to disclose or render obvious such a ratio of the number of magnets to the number of coil poles in each elementary pattern. In fact, Evans fails to disclose or suggest an elementary pattern as defined in the claimed invention. The Examiner cites Fig. 1 of Evans as teaching an elementary pattern. See Office Action p. 3. However, Fig. 1 does not show a specific arrangement and use of a specific number of magnets and coil poles to form any type of *pattern*. Instead, Fig. 1 of Evans merely shows a rotor (10) with 12 magnetic poles. There is no relationship between the windings and the poles of Fig. 1 of Evans that forms any type of pattern, much less identical elementary patterns. Further, a complete review of Evans reveals that Evans does not mention any type of pattern being formed by the magnets and coil poles in the description of Fig. 1. See Evans, col. 2, ll. 32 – col. 3, ll. 23. In fact, the only “arrangement” of the magnetic poles mentioned in Evans is that the poles are wound with windings, where for each adjacent pair of wound poles, the windings on the two adjacent poles are wound in opposite directions. See Evans, col. 2, ll. 54-57. However, even assuming *arguendo* that the aforementioned disclosure in Evans teaches some type of pattern, it is clear that an elementary pattern that requires a specific order of magnets and coils and is used to control the power to the electronic rotating machine as required by the claimed invention is not formed in Evans.

It logically follows from the above that Evans cannot possibly disclose or render obvious the requirement that N_a is equal to or greater than 1, N_b is equal to or greater than 1, N_{me} is equal to or greater than 1, and the pair N_a, N_b is different than 1:1. The Examiner cites Fig. 1 of Evans on page 6 of the Action as disclosing the limitations of original dependent claim 2. Applicant respectfully disagrees, and points out that Fig. 1 of Evans makes no mention of a ratio that is not 1:1. The Examiner, in equating Fig. 1 to the limitation of claim 2, has either read out

the particular limitation of the claimed invention or completely mischaracterized the teachings of Evans, both of which are wholly improper.

Further, Torok fails to supply that which Evans lacks. Torok merely teaches a reluctance pole. *See* Office Action, p. 10. However, Torok fails to disclose or render obvious an elementary pattern as defined in the claimed invention, where the ratio of the number of magnets to the number of coils is not 1:1.

In view of the above, it is clear that the Examiner's contentions fail to support an obviousness rejection of the amended independent claims. Pending dependent claims are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Claim 18

Claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans and Torok, in view of US Patent No. 6,847,143 ("Akemakou"). To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.


As described above, Evans and Torok fail to disclose or render obvious the limitations of amended independent claim 1. Further, Akemakou fails to disclose or otherwise provide that which Evans and Torok lack, as Akemakou fails to disclose or render obvious an elementary pattern as defined in the claimed invention, where the ratio of the number of magnets to the number of coils is not 1:1. Akemakou merely discloses uses for the claimed electronic rotating machine. *See* Action, p. 10. In view of the above, it is clear that amended independent claim 1 is patentable over Evans, Torok, and Akemakou, whether considered separately or in combination. Dependent claim 18 is patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number [17170/006001]).

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Respectfully submitted,

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